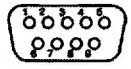
EVD Series

MILITARY QUALITY, REMOVABLE CONTACT, SUBMINIATURE-D CONNECTORS

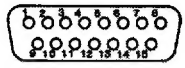
FOR MILITARY AND SEVERE INDUSTRIAL ENVIRONMENTAL APPLICATIONS

CONTACT VARIANTS

FACE VIEW OF MALE OR REAR VIEW OF FEMALE

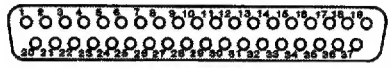


EVD9

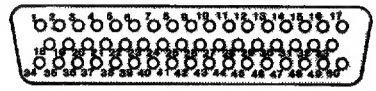


EVD15

EVD25



EVD37

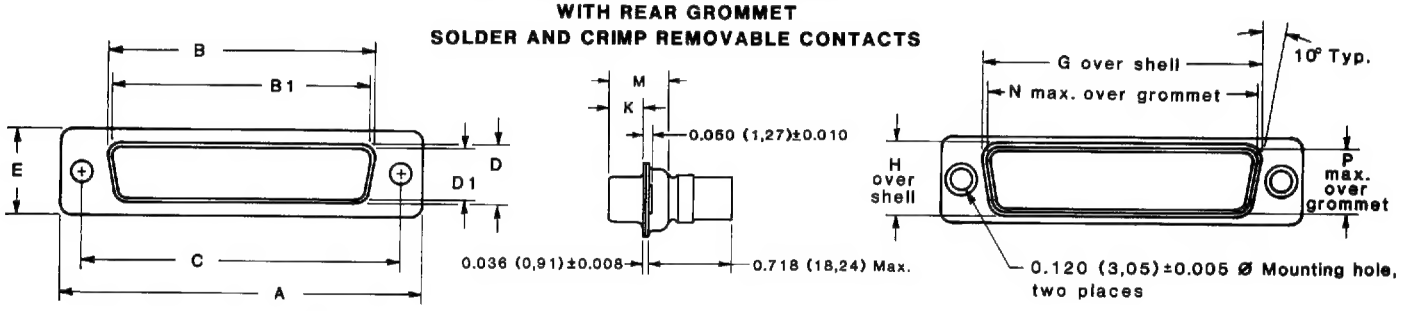


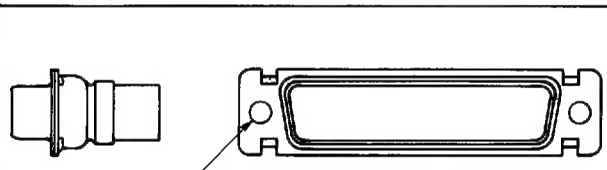
EVD50

STANDARD SHELL ASSEMBLY

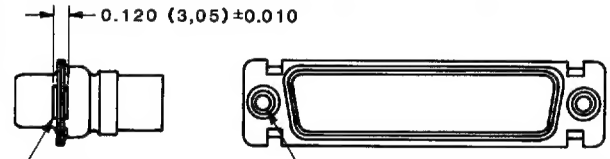
WITH REAR GROMMET

SOLDER AND CRIMP REMOVABLE CONTACTS





OPTIONAL SHELL ASSEMBLY



OPTIONAL SHELL ASSEMBLY WITH UNIVERSAL FLOAT MOUNTS

CONNECTOR VARIANT SIZES	A ±0.015	B ±0.005	B1 ±0.005	C ±0.005	D ±0.005	D1 ±0.005	E ±0.015	G ±0.010	H ±0.010	K ±0.005	M ±0.010	N Max.	P Max.
EVD 9 M	1.213 (30,81)		0.666 (16,92)	0.984 (24,99)		0.329 (8,36)	0.494 (12,55)	0.759 (19,28)	0.422 (10,72)	0.233 (5,92)	0.422 (10,72)	0.769 (19,53)	0.432 (10,97)
EVD 9 F	1.213 (30,81)	0.643 (16,33)		0.984 (24,99)	0.311 (7,90)		0.494 (12,55)	0.759 (19,28)	0.422 (10,72)	0.243 (6,17)	0.429 (10,90)	0.769 (19,53)	0.432 (10,97)
EVD 15 M	1.541 (39,14)		0.994 (25,25)	1.312 (33,32)		0.329 (8,36)	0.494 (12,55)	1.083 (27,51)	0.422 (10,72)	0.233 (5,92)	0.422 (10,72)	1.093 (27,76)	0.432 (10,97)
EVD 15 F	1.541 (39,14)	0.971 (24,66)		1.312 (33,32)	0.311 (7,90)		0.494 (12,55)	1.083 (27,51)	0.422 (10,72)	0.243 (6,17)	0.429 (10,90)	1.093 (27,76)	0.432 (10,97)
EVD 25 M	2.088 (53,04)		1.534 (38,96)	1.852 (47,04)		0.329 (8,36)	0.494 (12,55)	1.625 (41,28)	0.422 (10,72)	0.230 (5,84)	0.426 (10,82)	1.635 (41,53)	0.432 (10,97)
EVD 25 F	2.088 (53,04)	1.511 (38,38)		1.852 (47,04)	0.311 (7,90)		0.494 (12,55)	1.625 (41,28)	0.422 (10,72)	0.243 (6,17)	0.429 (10,90)	1.635 (41,53)	0.432 (10,97)
EVD 37 M	2.729 (69,32)		2.182 (55,42)	2.500 (63,50)		0.329 (8,36)	0.494 (12,55)	2.272 (57,71)	0.422 (10,72)	0.230 (5,84)	0.426 (10,82)	2.282 (57,96)	0.432 (10,97)
EVD 37 F	2.729 (69,32)	2.159 (54,84)		2.500 (63,50)	0.311 (7,90)		0.494 (12,55)	2.272 (57,71)	0.422 (10,72)	0.243 (6,17)	0.429 (10,90)	2.282 (57,96)	0.432 (10,97)
EVD 50 M	2.635 (66,93)		2.079 (52,81)	2.406 (61,11)		0.441 (11,20)	0.605 (15,37)	2.178 (55,32)	0.534 (13,56)	0.230 (5,84)	0.426 (10,82)	2.188 (55,58)	0.544 (13,82)
EVD 50 F	2.635 (66,93)	2.064 (52,43)		2.406 (61,11)	0.423 (10,74)		0.605 (15,37)	2.178 (55,32)	0.534 (13,56)	0.243 (6,17)	0.429 (10,90)	2.188 (55,58)	0.544 (13,82)

DIMENSIONS ARE IN INCHES (MILLIMETERS)
ALL DIMENSIONS SUBJECT TO CHANGE

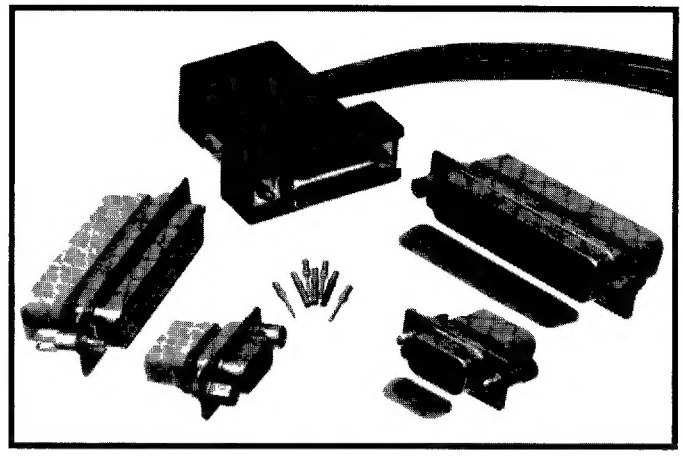
Environmental-D Series

MILITARY QUALITY, REMOVABLE CONTACT, SUBMINIATURE-D CONNECTORS

FOR MILITARY AND SEVERE INDUSTRIAL ENVIRONMENTAL APPLICATIONS

Size 20 Contacts
Solder and Crimp
Removable

Military Quality and
Severe Industrial
Environmental Applications



Environmental-D Series connectors were designed specifically for severe environmental applications where the connector may be subjected to high humidity conditions, rain and/or immersed in water or organic liquids. Environmental protection of the connector is provided by the fluorosilicone grommet, interfacial seal and bonded connector components.

The connectors and contacts are compatible with MIL-C-24308 and MIL-C-39029.

EVD Series connectors utilize precision machined contacts with closed crimp barrel terminations and solder wire terminations. Female contacts are of closed entry design featuring a stainless steel shroud or an "open entry" Robi-D design. Cable support and locking system accessories are available.

ENVIRONMENTAL-D SERIES TECHNICAL CHARACTERISTICS

MATERIALS AND FINISHES:

Insulator:	Glass filled DAP per MIL-M-14 type SDG-F, UL 94V-0, green color.
Contacts:	Male contacts-precision machined brass alloy. Female contacts – precision machined high tensile copper alloy with stainless steel shroud or Robi-D "open entry" style.
Contact Plating:	Military performance – 0.000050 inch (1,25 microns) gold over copper plate. Industrial performance – 0.000030 inch (0,75 microns) gold over nickel.
Shells:	Steel or brass with zinc plate with dichromate seal and stainless steel, passivated.
Mounting Spacers:	Steel or brass, zinc plate with dichromate seal.
Jackscrew Systems:	Steel with zinc plate and dichromate seal and stainless steel, passivated.
Hoods:	Composite.
Grommet and Interfacial Seal:	Fluorosilicone Rubber per MIL-R-25988.
Bonding Material:	Fluorosilicone based sealant/adhesive.
Sealing Plug:	Teflon.

ELECTRICAL CHARACTERISTICS:

Dry Conditions, Basic Connector Body:

Contact Current Rating:	7.5 amperes, nominal.
Initial Contact Resistance:	0.005 ohms maximum.
Proof Voltage:	1000 V r.m.s.
Insulator Resistance:	5 G ohms.
Clearance and Creepage Distance (minimum):	0.039 inch (1,0 mm).
Working Voltage:	300 V r.m.s.

MECHANICAL CHARACTERISTICS:

Removable Contacts:	Insert contact to rear face of insulator and release from rear face of insulator. Size 20 contact, male – 0.040 inch (1,0 mm) diameter; female – closed entry design with stainless steel shroud or Robi-D "open entry" style.
Contact Retention in Insulator:	9 lbs. (40 N).
Contact Terminations:	Closed barrel crimp, wire sizes 20 AWG (0,5 mm²) through 24 AWG (0,25 mm²); Solder contacts – 0.042 inch (1,06 mm) minimum hole diameter for 20 AWG (0,5 mm²) through 24 AWG (0,25 mm²) wire size.
Polarization:	Trapezoidally shaped shells.
Locking Systems:	Jackscrews.
Mechanical Operations:	500 operations minimum per IEC 512-5.

ENVIRONMENTAL CHARACTERISTICS:

EVD Connectors, having crimp contacts, meet all of the applicable requirements of MIL-C-24308 in addition to the requirements shown below:

Test	Requirements
Humidity Per MIL-STD 1344, Method 1002.2, Type II.	1) No deterioration of performance. 2) Insulation resistance greater than 100 megaohms. 3) Withstand a potential of 1000 VAC (rms) without evidence of flashover or breakdown.
Fluid Immersion Per MIL-STD 1344, Method 1016.	1) No detrimental damage. 2) Meet mating and unmating requirements of MIL-C-24308.
Immersion, 2 hours at a depth of 36 inch (914,4 mm) in mated condition per MIL-STD 810 Method 512.3. Procedure 1.	While Immersed: 1) Insulation resistance greater than 100 megaohms. 2) Withstand a potential of 1000 VAC (rms) without evidence of flashover or breakdown.
Temperature Range:	-55°C to +125°C.

EVD Series

MILITARY QUALITY, REMOVABLE CONTACT, SUBMINIATURE-D CONNECTORS

FOR MILITARY AND SEVERE INDUSTRIAL ENVIRONMENTAL APPLICATIONS

ORDERING INFORMATION – CODE NUMBERING SYSTEM

Specify Complete Connector By Following Steps 1 Through 9
Insert "0" When Step Is Not Used

STEP	1	2	3	4	5	6	7	8	9
	EVD	25	P	0	0	Z	0	S	

STEP 1 Basic Series

EVD Series

STEP 2
EVD Connector Variants

9, 15, 25, 37, 50

STEP 3 Connector Gender

P – Male contact with interfacial seal
F – Female contact

STEP 4 Type of Contacts

0 – Order contacts separately.
1 – Crimp, 20 AWG – 24 AWG (0,5 mm²-0,25 mm²) kitted with connector.
2 – Solder, 20 AWG – 24 AWG (0,5 mm²-0,25 mm²) kitted with connector.

***STEP 5 Mounting Style**

0 – Mounting hole, 0.120 (3,05) diameter.
F – Float mounts, Universal
S2 – Swaged spacer, 4-40 threads, 0.125 (3,18) length
S5 – Swaged locknut, 4-40 threads

***STEP 6 Hoods**

0 – None
Z – Composite hood with rotating male jackscrews
Z4 – Composite hood with fixed female jackscrews

***STEP 7 Locking Systems**

0 – None, specify only with 'Z' hood option of STEP 6
T2 – Fixed female jackscrews
E – Rotating male jackscrews

STEP 8 Shell Options

S – Stainless steel, passivated
0 – Zinc plated with dichromate seal

STEP 9 Special Options

Consult Sales Department

Order sealing plugs separately, part number 4737-37-0.

*For additional information on accessories listed on STEP 5, 6 and 7, see Accessories catalog.